Dialogic® Brooktrout® FoIP Product Overview

Dialogic® Brooktrout® FoIP Products

- Dialogic® Brooktrout® TR1034 Fax Board (IP enabled) and Dialogic® Brooktrout® SR140 Fax Software

Brooktrout TR1034 Fax Board

Brooktrout SR140 Fax Software

Dialogic® Brooktrout® TR1034 Fax Board and Dialogic® Brooktrout® SR140 Fax Software

PSTN Installation

Future migration to IP installation

IP installation

Dialogic® Brooktrout® TR1034 Fax Board – TEC Program

- Dialogic Corp's "Technology Expansion Capability" (TEC)
  - TECUpdate.exe distributed with software
- Investment Protection by allowing features to be added to the Dialogic® Brooktrout® TR1034 Fax Boards
- Channel expansion with software license key
  - Migrate to 8, 16 or 24 T1 channels
- Fax Over IP Software Expansion Capability
  - Start with PSTN then migrate to IP
  - Board must have on-board IP port
- License supplied by partner, applied with TEC Update tool, then server rebooted
  - Remember to license fax software to take advantage of new channels

Dialogic® Brooktrout® SR140 Fax Software - Features

- "Virtual board" - emulates a Dialogic® Brooktrout® TR1034 Fax Board in IP mode
- Flexible line of host-based software
  - 2, 4, 8, 12, 24, 48 and 60 channels
- Uses ITU standard T.38 protocol
  - Over UDP Transport Layer
- Uses minimal amount of server processing power
- Supports SIP and H.323 IP call control protocols only – no TDM

Dialogic will activate the Dialogic® Brooktrout® SR140 Fax Software end user system via Web - ISVs / VARs are not tasked with this process

Benefits Offered

- Reduced complexity, lower maintenance costs
  - No boards to install/maintain, no T1/E1 lines to configure
- Works just like traditional, real-time faxing
  - It *is* traditional, real-time faxing
    - What do you hear when you call the Dialogic® Brooktrout® SR140 Fax Software or Dialogic® Brooktrout® TR1034 IP Fax Board? Fax tone….
  - Delivers the same level of quality and real-time capability and confirmation as a fax machine
- Reliable faxing uses time-tested and proven Dialogic® Brooktrout® T.30 protocol implementation
  - Excellent interoperability; will communicate with any Group 3 fax device using T.30 protocol

Dialogic® Brooktrout® SR140 Fax Software – ISV Value Proposition

- Simplify Logistics and Deployment
  - Support and sell a complete software-only fax server
  - No inventory to be concerned with; no field upgrades; no need for RMAs; no PCI/PCIe slot considerations; no need to open server
- Extend software revenue streams
  - Sell software upgrades with existing software products
- Easy to Support
  - Integrate to one API; benefit from board based PSTN/FoIP, and host-based FoIP
- Uses minimal amount of server processing power
  - ~3%, 30 channels simultaneous fax, 3.0 gig P4 processor (without app)

Software and License Distribution

- Dialogic offers licensed Host-Based Fax software products using the Dialogic® Brooktrout® API
- Our software will be embedded in the ISVs products
- We will ship Dialogic® Brooktrout® SDKs to ISV Partners; ISVs will distribute Dialogic® Brooktrout® SR140 Fax Software with their applications
- Dialogic will sell Dialogic® Brooktrout® SR140 Fax Software licenses in a similar way we sell boards via traditional sales channels

ISVs CD ROM
ISV application

Dialogic® Brooktrout® SR140 Fax Software and Tools

Dialogic® Brooktrout® TR1034 Fax Board Drivers

Software Licenses

- ISVs, their Channel and VARs will sell Dialogic Licenses via normal channels of distribution
  - Think of them as valuable tokens
  - They provide the right to use certain features of our software, i.e., fax channels
  - A Dialogic® Brooktrout® SR140 Fax Software license is just a board, virtualized

- Licenses are “node-locked” to one computer
  - Involves product activation between Dialogic and the end-user
    - Quick, easy
  - In software business, a well recognized way of preventing piracy

How Node Locking / Product Activation Works

– User Installs Software ← Software and Unique License Certificate bought via Sales Channel

– Enters License Key → License Key, Node ID and Registration data stored in Dialogic® server (Macrovision)

– Registers

– Activates
- *Live or with help* ← Activation Code from Dialogic

– You are Node Locked!

Software Upgrades

- Licensing will be additive
  - Users can purchase additional channels or features and plug them into an existing system
    - Unlike other licensing schemes, which replace old with new
    - We do not need to know anything in advance about a system
    - We store end user information
    - Like adding another board
- License SKUs will be denominations
  - Like currency - two five dollar bills make ten, two 24 channel Dialogic® Brooktrout® SR140 Fax Software licenses make 48 channels
    - Only production licenses can be “stacked”
- Activation of new licenses is required if you add more licenses later
    - End user information is kept up to date

System Requirements for Dialogic® Brooktrout® SR140 Fax Software

- Operating Systems supported:
  - Windows® 2000 Advanced Server, Server, or Professional OS, with SP 4, Windows® Update 822831
  - Windows® XP Professional OS with SP2
  - Windows ® Server 2003 OS, Standard, Enterprise and Server with SP2
    - 32x and 64x Enterprise and Server supported
  - Windows ® Server OS 2008, Enterprise Edition
    - Dialogic® Brooktrout® SDK 6.0 or later
    - 32x and 64x versions supported
  - Redhat Enterprise Linux ES 3.0, 4.0, 5.0 or AS 3.0,4.0
    - Dialogic® Brooktrout® SDK 5.2.0 and later
  - 64x Windows® OS versions require application still to be 32x
- Minimum System requirements
  - Pentium 4 / 2.66 GHz
  - 512 MB RAM
  - Ethernet connection

Dialogic® Brooktrout® SR140 Fax Software – CPU Load

- Processor load for Dialogic® Brooktrout® SR140 Fax Software channels on the following system:
  - Pentium 4 / 2.66 GHz
  - 512 MB PC2100 DDR SDRAM memory

Processor	8 Channels	30 Channels	60 Channels	120 Channels
Pentium 4 – 3.0 GHz	1%	3%	7%	13%
Dual Xeon 3.4 GHz	1%	2%	4%	5%

Dialogic® Brooktrout® SR140 Fax Software License Activation

Dialogic® Brooktrout® License Manager

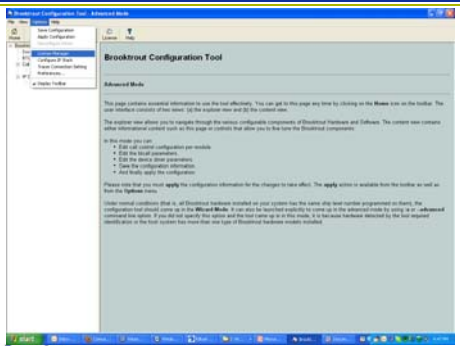
- Dialogic® Brooktrout® License Manager is an SR140 licensing utility included with LAN-fax software or Dialogic® Brooktrout® fdtool
- Activates SR140 license by locking together the SR140 license key with the Node ID from the host server or session
- Installs license on server – virtual board installation
- User still required to have appropriate licensing in fax software to enable use of the SR140 fax channels
- Dialogic® Brooktrout® License Manager is not needed if installing TR1034 FoIP board
  - Licensing strictly through fax software

Launching Dialogic® Brooktrout® License Manager

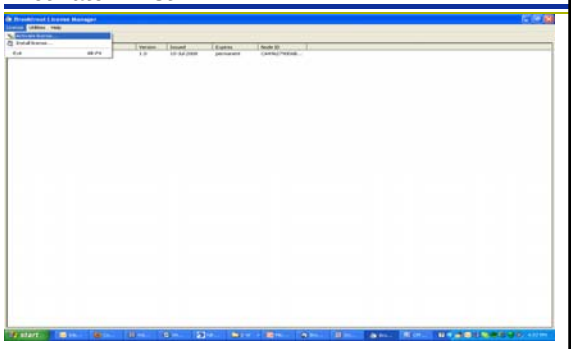
- Open from Dialogic® Brooktrout® Configuration Tool
  - Click “License” button along top
  - Choose “Options” from menu, then “License Manager”
- Different fax software vendors put config tool in different places and open it at different places
  - In fdtool, done by clicking “Configure” button
  - Can also open by activating ‘brktlicmgr.exe’
    - Again, location varies depending on software

Dialogic® Brooktrout® Configuration Tool – Opening License Manager from “License” Button

Dialogic® Brooktrout® Configuration Tool - Opening License Manager from “License” Choice

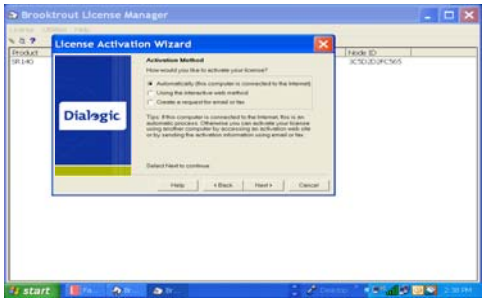


Dialogic® Brooktrout® License Manager – Must "Activate" First



Dialogic® Brooktrout® License Manager

- Activation - automatically



Activation - Via Dialogic® Brooktrout® License Manager

- If the computer on which the Dialogic® Brooktrout® SR140 Fax Software is being installed is connected to the Internet…
  - "Automatically"
- If you want to activate the license using a different computer that is connected to the Internet…
  - "Using the Interactive Web method":
  - www.dialogic.com/activation
  - Very useful, since servers might have too high security settings and might not have the port 8080 open
- If there is NO internet connection
  - "Create a request for email or fax"

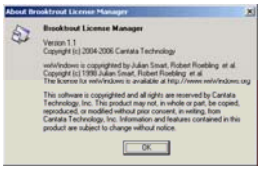
2 Types of Node IDs (Node Lock)

- COMPOSITE
  - Combination of machine/host name and MAC address
  - HOSTID=COMPOSITE=430E486F5E08
- VID (vendor ID)
  - From Dialogic® Brooktrout® SDK 5.2 on
  - Independent of machine name; based on MAC address only
  - Virtual Adapters (VPN) pose no problem
- Your license manager tool will tell you which type of node lock got calculated. Make sure to select the correct type when activating via the Web!! www.dialogic.com/activation
  - If you activate a license as "VID" and your application is based off an SDK earlier than 5.2, you'll see "Broken signature" message in License Mgr
- Existing license files generated with older Brooktrout SDKs, and therefore, with COMPOSITE, still valid on newer SDKs should you happen to upgrade fax software
  - No different than if you upgrade software when using board product
  - You cannot tell machine name or MAC address from Node ID

2 Types of Node IDs

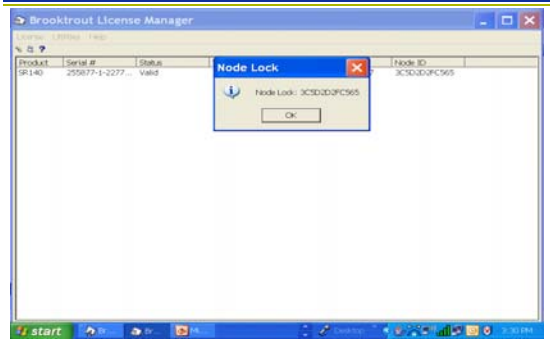
In menu of Dialogic® Brooktrout® license manager -> Help -> About:

- License manager version earlier than 2.0: Select Node ID type COMPOSITE



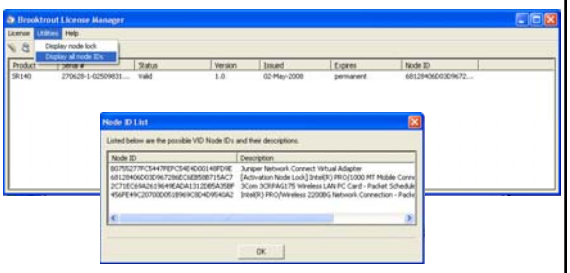
- License manager version 2.0 or greater: Select Node ID type VID

Get Node ID from License Manager 1.X



Getting Node Identifications from License Mgr 2.0.0 +

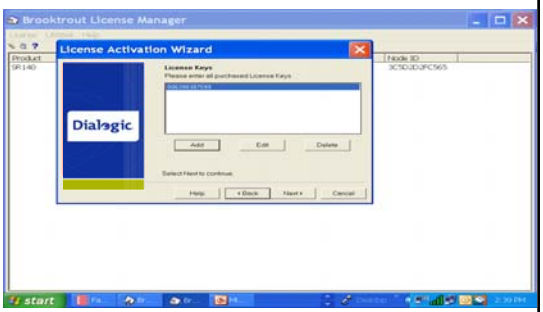
- Can see list of Node Identifications on system



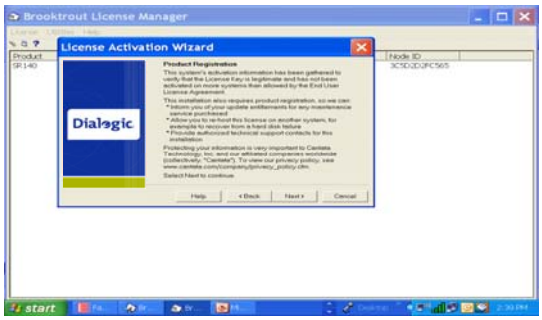
Automatic License Generation and Node ID's

- In Dialogic® Brooktrout® License Manager 1.X, no way to tell which Node ID you were presented
  - Lock down license then need to find out manually which NIC the Dialogic® Brooktrout® SR140 Fax Software was locked to
  - Be sure to disable any wireless NICs first
- In Dialogic® Brooktrout® License Manager 2.0.0+, select Node ID from list presented
  - Double-click on one you want to select it, then right-click and do "save"
  - Create text file in directory where BrktLicMgr.exe is located
  - Name the text file "brktlicmgr.cfg"
  - NodeID=(enter node ID)
    - Only the one line, no spaces or any other characters

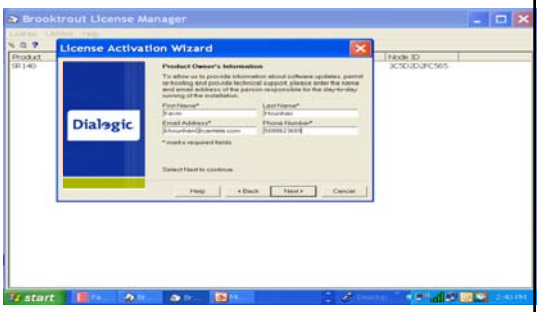
Add License Key



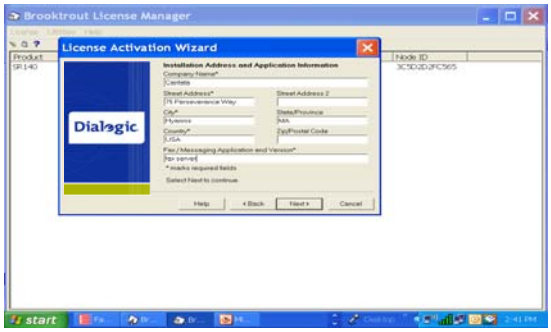
Product Registration



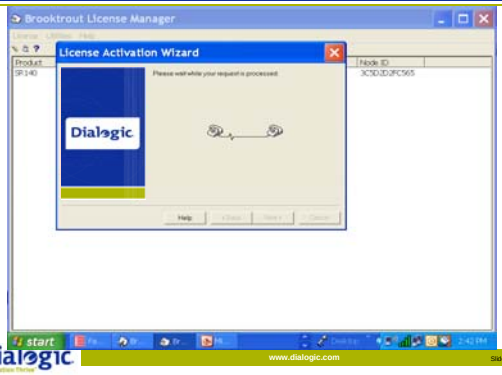
Required Fields (noted with *)



Activation Through Web

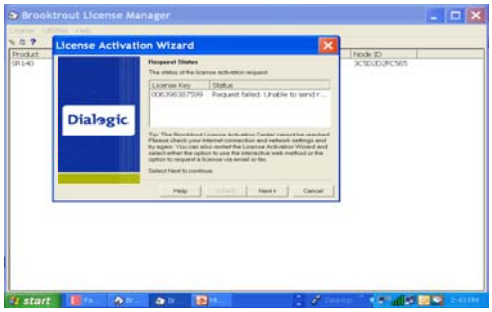


Connection Successful…?



…Or Not

Possible cause – firewall issues

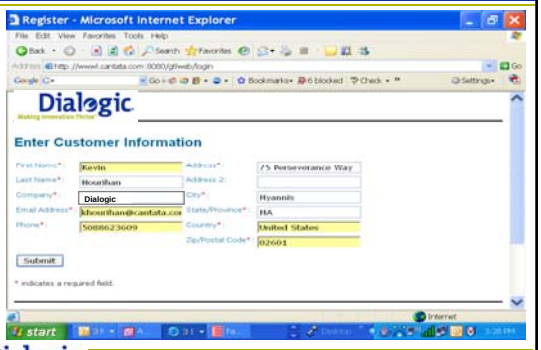


"Interactive Activation"

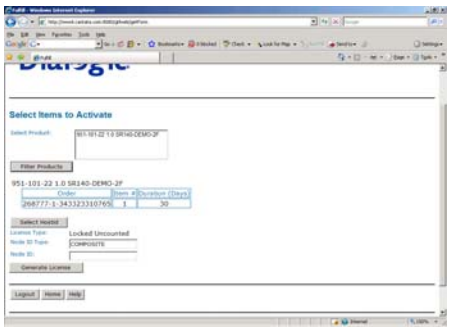
- Directly on web site – www.dialogic.com/activation
  - Will be automatically redirected to another URL
  - Choose "Save the instructions to a file"
  - Save you from having to manually type the Node ID later on
  - Pay attention to Node Lock to be sure it's the one you want

‘Interactive’ Activation Process on Web

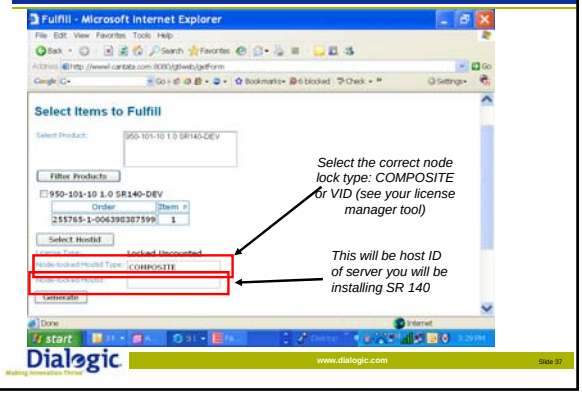
Customer Information



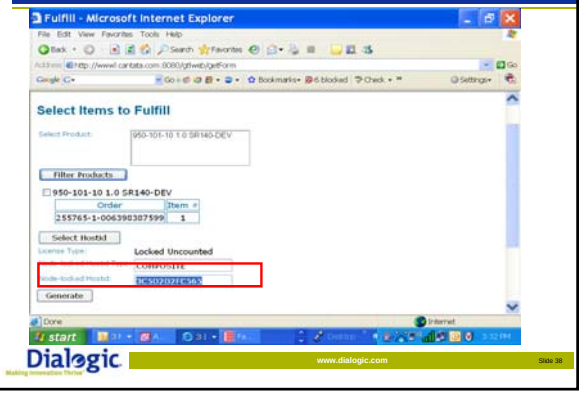
Generate – Rehost – View License: Generate



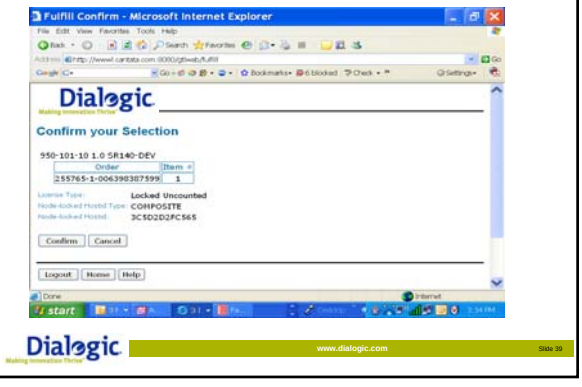
Must Enter “Node-Locked” Host ID


Fulfill - Microsoft Internet Explorer
Select Items to Fulfill
Filter Products
950-101-10 1.0 SR140-DEV
Select Hostid
COMPOSITE
Generate
Select the correct node lock type: COMPOSITE or VID (see your license manager tool)
This will be host ID of server you will be installing SR 140
Dialogic
www.dialogic.com
Slide 37

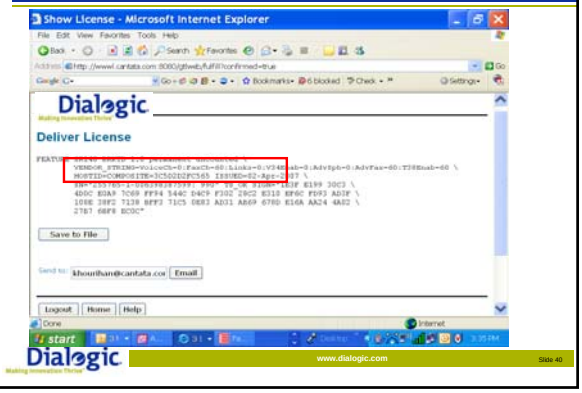
Enter “Node Lock” Host ID



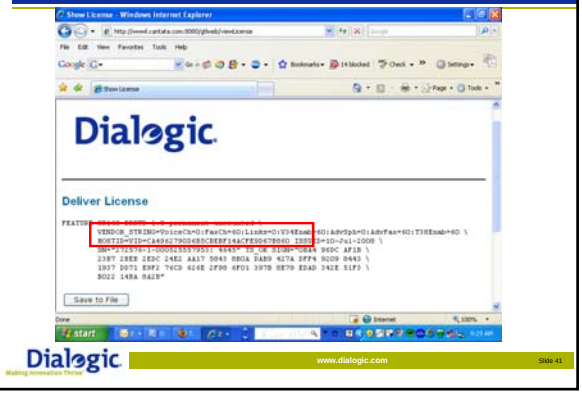
Final Confirmation – After Hitting “Generate”



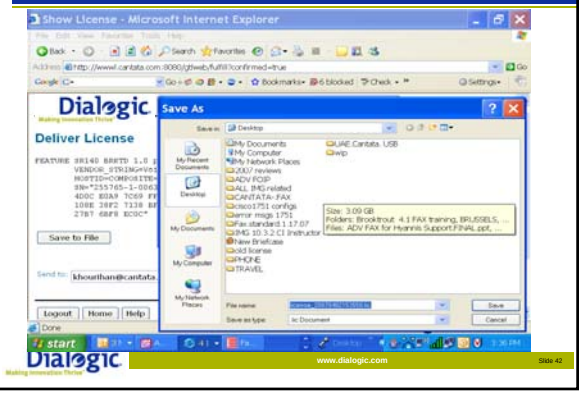
Todaysdate.LIC (Composite License)



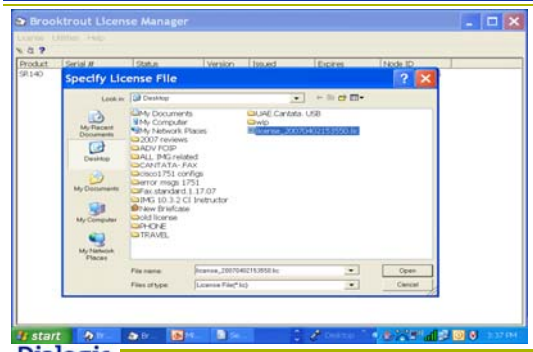
Todaysdate.LIC (VID License)



Save File



Install the New License by "Pointing" to it



Re-Hosting

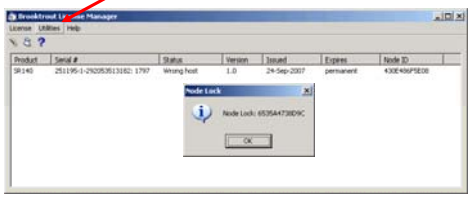
- Licenses are Node Locked to one computer
  - It is illegal to run licensed software on more than one system
  - It is impossible to activate on more than one system
  - Demo LAC's can't be re-hosted, only production LAC's can be
    - If demo LAC expires or becomes invalid, request another from whom you obtained first LAC
- So what if the computer blows up at 9pm on Saturday...?
  - First rehost may be done online with no direct involvement from Dialogic Support
    - Subsequent rehosts will require involvement from Dialogic Support
      - ***True whether first rehost was done online or through Support***
  - We also recommend keeping a "backup" license key for emergencies
- Returns?
  - Our normal "no return" policy applies to Licenses too
  - However, if a return scenario arises, there is a new process with Sales Support to handle return of inactivated or activated licenses

Re-Hosting - More

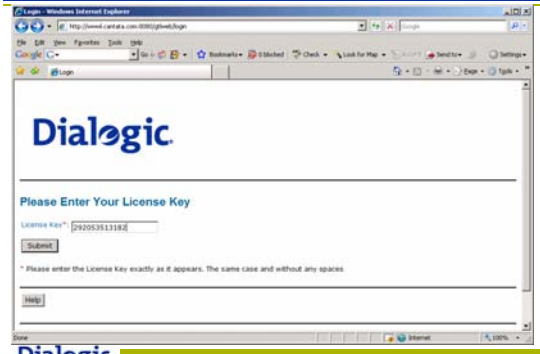
- NIC Teaming
  - Before activating SR140 license, turn on NIC teaming first
  - This creates a Virtual Adapter to which the SR140 license may be locked
  - Advantage: if either NIC fails and must be replaced, the SR140 license remains valid and doesn't need to be rehosted
- Consider avoiding need to rehost by locking to motherboard's Ethernet
  - Nearly all servers' motherboards have Ethernet
  - Lock SR140 license to Node ID from motherboard's Ethernet; if NIC port on server burns out, the SR140 license will remain valid

Re-Hosting

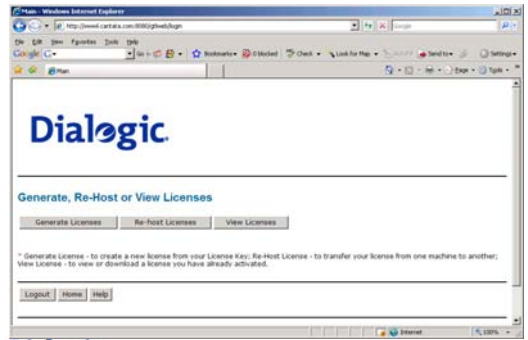
- Utilities -> Display Node Lock…



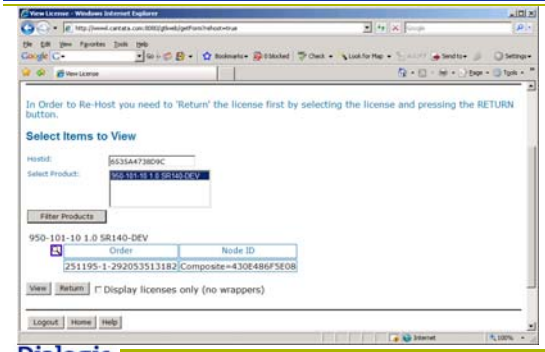
Re-Hosting



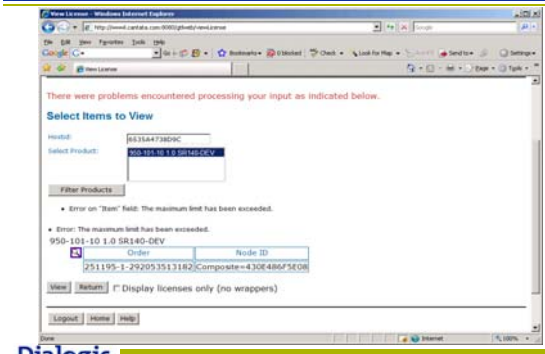
Re-Hosting



Re-Hosting - Return

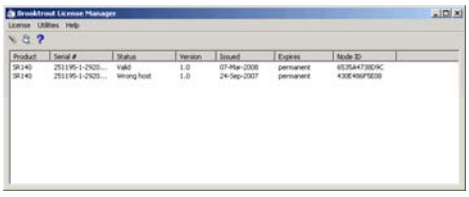


Re-Hosting – Common Failure Message Example



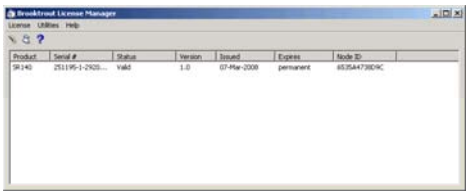
Re-Hosting

- After installing rehosted license:



Re-Hosting

- After removing the old license .lic file manually:



Lab 1 Exercise

1. Open up NFR 2 port license envelope
2. Activate “automatically”
3. Alternate choice – activate thru: www.dialogic.com/activation
4. Complete installation
5. Configure for SIP using FaxVoiceDiag tool
   - A. If FVD tool is not installed already, install using details from instructor
   - B. Please refer to whiteboard for IP address, subnet mask, phone numbers
6. Test to self, instructor laptop & others
7. Stop! Check with instructor before proceeding
8. Optional – repeat steps 5 & 6 for H.323 if time permitting